COMMUNITY-BASED

Fish and Wildlife Work Plan

Na-Cho Nyäk Dun Traditional Territory 2008-2013

COMMUNITY-BASED FISH AND WILDLIFE WORK PLAN FOR THE NA-CHO NYÄK DUN TRADITIONAL TERRITORY 2008–2013

For additional copies of this report contact:

Director, Fish and Wildlife Branch
Yukon Department of Environment (V-5A)
P.O. Box 2703
Whitehorse, Yukon Y1A 2C6
E-mail: fish.wildlife@gov.yk.ca

First Nation of Na-Cho Nyäk Dun
Box 220
Mayo, Yukon Y0B 1M0
E-mail: main@nndfn.com

Mayo District Renewable Resources Council
P.O. Box 249
Mayo, Yukon Y0B 1M0
E-mail: mayorrc@northwestel.net

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On the front cover: Snake River, Blackstone sheep, gentian (John Meikle), Moose cow and calves (Rob Florkiewicz) and wood frog (John Meikle).

Disclaimer:
This Community-Based Fish and Wildlife Work Plan shall not create any commitments or obligations that are legally binding on the planning participants or create or affect any legal rights of the planning participants. Without limiting the generality of the foregoing, this Community-Based Fish and Wildlife Work Plan shall not create, affect, define, interpret or apply any roles, responsibilities, rights or interests under the First Nation of Na-Cho Nyäk Dun Final or Self-Government agreements.

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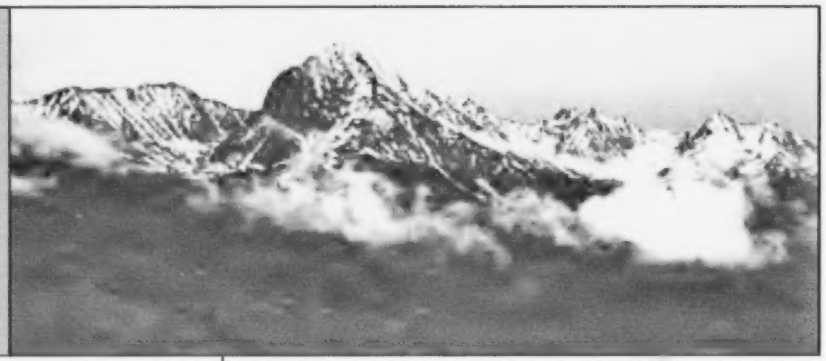
introduction



WHAT THIS PLAN IS ABOUT

This plan represents a cooperative approach to fish and wildlife management involving the First Nation of Na-Cho Nyäk Dun (NND), the Mayo District Renewable Resources Council (MDRRC), and Environment Yukon (YG); hereafter referred to as the planning participants. The intent of this plan is to document concerns and potential solutions voiced about fish and wildlife management in the NND traditional territory (NNDTT), and not to legally bind any of the involved planning participants to specific actions or solutions described herein. This community-based fish and wildlife plan is intended to be implemented over a five-year period (2008–2013) and attempts to coordinate the efforts of the planning participants to address local fish and wildlife concerns.

The 2008–2013 Community-Based Fish and Wildlife Work Plan for the NNDTT is the fourth community-based fish and wildlife plan for the traditional territory. The plan follows the "1993–1996 Integrated Big Game Management Plan for the Mayo Region," the "1997 Integrated Wildlife Management Plan for the Nacho Nyäk Dun Traditional Territory" and the "2002–2007 Community-Based Fish and Wildlife Management Plan for the Nacho Nyäk Dun Traditional Territory."

Development of the community-based approach to fish and wildlife plans originated in the community of Mayo and over the past fifteen years has been applied throughout the Yukon to engage communities in work planning exercises. These are practical plans that coordinate and unify the management of fish and wildlife populations and their habitats between the local Renewable Resources Council, First Nation and Environment Yukon, Fish and Wildlife Branch.

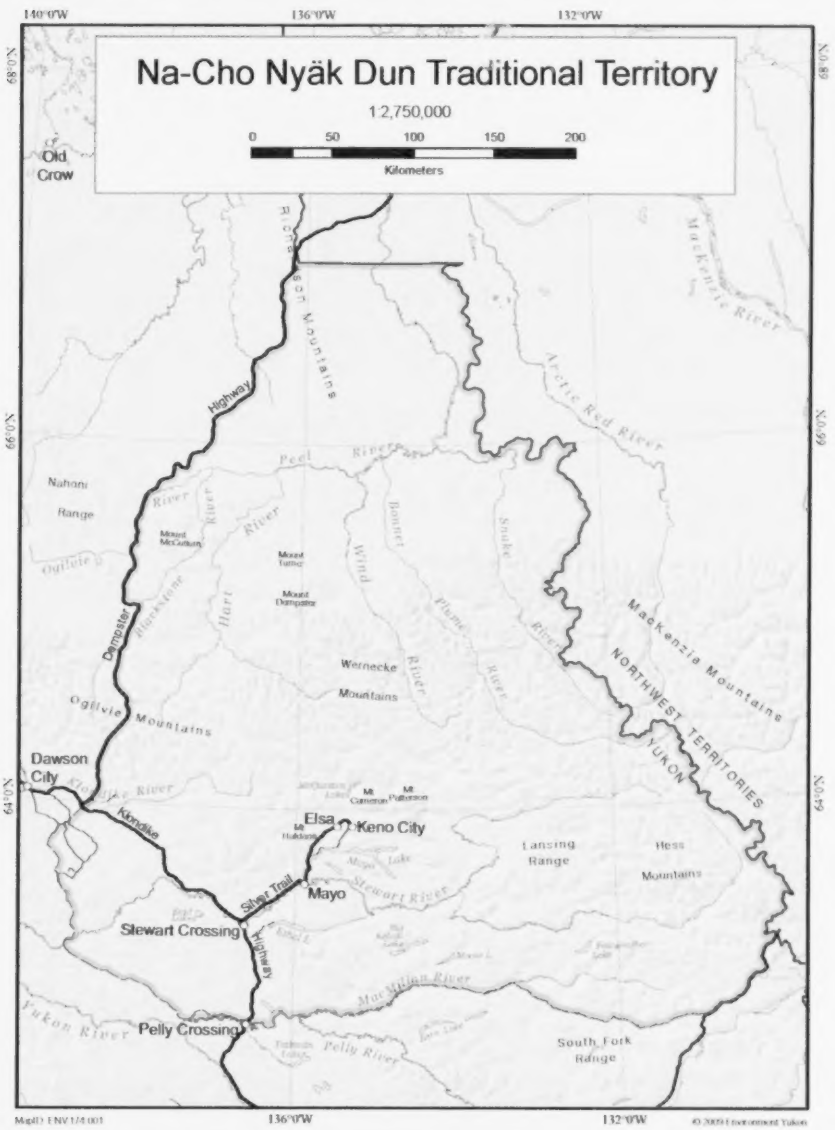
In the winter of 2007–2008, community workshops were held in Mayo to develop the following plan. The plan addresses community concerns about moose, caribou, bear, wolf, and fish populations, along with habitat, harvest, wildlife viewing and other wildlife and land issues, and suggests opportunities for public participation and ways to better inform area residents about management activities.

Photo: Mount Joy, *John Meikle*

WHAT THIS PLAN IS ABOUT

The planning participants who developed this plan intend the plan to be a guide for the management of fish and wildlife populations, habitat, and harvest practices in the NNDTT from 2008 to 2013. Implementation of the proposed solutions is subject to priorities and budgetary and capacity constraints for each of the planning participants.

Figure 1. Na-Cho Nyäk Dun Traditional Territory.



HOW THE PLAN WAS DEVELOPED

The plan was developed through the following steps:

- A review of 2002–2007 plan;
- Identification of community issues and concerns;
- A review of the issues and concerns;
- A community planning workshop; and
- Plan writing, review by the planning participants, and final production.

In June, 2007, a review of the 2002–2007 plan was completed, and the plan participants agreed to develop a new five-year plan. Afterward, the plan participants met in August 2007 to outline the process for completing the next plan.

During the fall of 2007, community members who spend time on the land were interviewed by the Northern Tutchone Habitat Steward. The questionnaire was developed by the MDRRC, YG and NND. The list of participants was compiled from the Local Knowledge Interview and Community Moose Monitoring Program participants lists. Signs were also posted around town inviting interested people to participate. The plan participants then met in November to review the issues identified through the survey and interviews.

An all-day workshop and public open house were held on January 19, 2008 to review the issues, gather new concerns and discuss potential solutions. Invitations were sent to people who participated in the survey, elders, trappers, local outfitters, and groups with technical information about wildlife in the traditional territory. Notices were also put up around town and a newsletter was developed and circulated throughout the community. The event was facilitated by Bob Hayes.

On March 14 and 15, 2008, the plan participants met to work through the issues and proposed solutions to develop the plan. An evening public event was held in Mayo on April 24, to present the draft plan back to the community. Comments on the draft plan were accepted until mid-May. Completion of the draft plan was interrupted, but revisions were completed and the plan was printed in December 2009.

STRUCTURE OF THE PLAN

The plan groups important issues or concerns by species or common topic. Each section of the plan contains:

1. Concerns
Concerns represent statements from the community or plan participants about current fish and wildlife management issues – these can relate to populations, harvest levels, information gaps about fish and wildlife, or a number of other topics. The concerns listed in this plan were compiled from the 2007 Mayo Community Wildlife Questionnaire, discussions with elders, and concerns stated at the January 2008 Workshop.

2. Proposed Solution(s)
Proposed solutions reflect the input gathered through the community survey and the discussions at the community workshops. Each proposed solution is summarized by one statement and followed by a short description providing more detail of the discussion and the rationale for proposing the solution.

3. By Who?
Identification of who will aim to carry out each proposed solution is also important to track. An activity may fall to one planning participant – for example, just NND – or may be a collaborative responsibility of all three planning participants – NND, MDRRC, and YG. The listing of these participants reflects the discussion at the community planning workshop.

Identification of planning participants to carry out the proposed solution is done with the best available knowledge of existing resources; however, implementation of the proposed solutions is subject to priorities and budgetary constraints for each of the planning participants.

priority concerns

PRIORITY ISSUES

The issues of highest concern identified through this community planning process are broad in scope and require long-term and cooperative solutions. The plan participants acknowledge the need to work together to address these issues.

- Management of harvest of moose and maintenance of moose population health will require a cooperative effort among all the plan participants.
- There is a need for baseline information on important habitats of fish and wildlife and on populations of sheep and caribou (Bonnet Plume herd) in the Wernecke Mountains because of increased development activities.
- There is a need for local area planning around the community because of increased pressures for land and more intensive land uses. This would help decision makers make recommendations with regard to development in the Mayo area to reduce conflict among users. Similar plans have been developed for areas such as Mt. Lorne outside of Whitehorse.
- There is a need to advocate wildlife values in all planning processes including the Peel Watershed Land Use Planning Process and the land use applications that are reviewed by the plan participants on a regular basis.
- There is a need for continued support of the game guardian program. The game guardian program has been delivered by NND and is important for monitoring behaviour on the land and encouraging ethical practices. Game guardians are seen more as wildlife stewards rather than enforcement agents.
- The MDRRC will focus on stewardship activities with youth as a way to encourage behaviour that values land, wildlife and the people who use it. Many of the concerns raised by the community were about unethical behaviours and practices and participants felt that the greatest way to change these is by working with youth and families who spend time on the land.

Photo: Moose in winter, *John Meikle*

IMMEDIATE ACTIONS

The following actions are those that the participants of the planning process identified as letters that should be written immediately, before the final plan is printed.

- MDRRC: Write a letter to Ducks Unlimited (DU) to demonstrate ongoing support for the monitoring of waterfowl that DU has conducted at Devil's Elbow and Ddhaw Ghro since 2005.
- MDRRC: Write a letter to NND to demonstrate ongoing support of the game guardian program that is currently delivered through the NND Lands.
- NND/MDRRC: Write a letter to the Village of Mayo to discuss a joint request to the Yukon Department of Energy, Mines and Resources to initiate development of a local area plan for the area around Mayo (the Village of Mayo itself already has an Official Community Plan), outlining the process they wish to undertake (including collection of background information, community meetings and input).
- MDRRC: Write a letter to the Yukon Fish and Wildlife Management Board (YFWMB) advocating completion of a trapline compensation policy for trappers affected by development pressure; the MDRRC would also raise the issue at the annual Chairs' meeting.
- MDRRC: Write a letter to the three Northern Tutchone First Nations and the Yukon Department of Energy, Mines and Resources to encourage the start of a regional land use planning process for the traditional territory.
- MDRRC: Write a letter to the Yukon Environmental and Socio-economic Assessment Board (YESAB) requesting that adequate maps be included with land and land use applications. This would improve the quality of responses to those requests.

ACTIONS FROM PREVIOUS PLANS

There have been many concerns and issues raised during the previous three fish and wildlife planning processes in the Mayo area. Due to time constraints and limited capacity of all the plan participants, there are several action items in previous plans which have not been completed. These were considered again in developing this new plan, and the participants agreed to carry forward those action items which could be reasonably achieved within the five years and still reflected the priority concerns heard from the community. These are summarized in Appendix B.

current issues

ACCESS

CONCERNS

The impact of access on wildlife and habitat due to the numerous roads and trails in the NND traditional territory is an ongoing concern for area residents. Off-road access by people in the NND traditional territory may disturb vegetation and scare animals away from important feeding or resting areas.

There seem to be more and more ATVs on the Clear Creek road. Local hunters are concerned that increased traffic leads to increased hunting pressure and disturbance on wildlife in this area.

PROPOSED SOLUTIONS

NND/MDRRC/YG: Address concerns about any excessive access by off-road vehicles in a local area plan for the area around Mayo (see Land Use Planning issues below) and through communication, education and the consideration of designated trails for hunting in areas where there are demonstrated problems.

Photo: Bladder Campion, *John Meikle*

BEARS

CONCERNS

People have noticed changes in bear populations, which have varied by region. The main local concern regarding bears is what impact the increasing numbers of predators has on moose and caribou.

There have been no surveys of bear abundance in the Mayo area. A study in the North Slope region is looking at the density and genetic makeup of the grizzly bear population. There is some interest in the community and by the YG carnivore biologist to do similar studies in the Mayo area and in more remote parts of the traditional territory where there are concerns about high harvest levels of bears. A study in the Mayo area would provide information for estimating the number of bears and address community questions about changing bear populations.

PROPOSED SOLUTION

MDRRC/NND: Invite the YG carnivore biologist to discuss bear issues, present potential options for studies and monitoring, and decide whether to develop a project in the traditional territory.

Photo: Black bear, *Cheryl Klippert*

CARIBOU

All Herds

CONCERNS

All of the caribou herds within the NNDTT (except for the Porcupine Caribou herd) are woodland caribou; the ranges of four distinct local herds – Ethel Lake, Clear Creek, Hart River, and Bonnet Plume – have been mapped. Local residents expressed a number of concerns about the status, health, harvest, and level of knowledge about these caribou.

Woodland caribou herds in the traditional territory are considered Northern Mountain Caribou, which have been designated as a population of Special Concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). The COSEWIC process requires a management plan to be developed and this is currently underway by wildlife management agencies in Yukon, Northwest Territories and British Columbia. The Northern Mountain Caribou management plan will contain information on the status, distribution, habitat, threats, and present studies of these herds, and identify knowledge gaps. The plan will also set broad management directions for the herds, as described by guiding principles, goals, objectives, and actions.

The Northern Mountain Caribou management plan will not address local concerns about caribou or their habitat in the traditional territory. YG, MDRRC and NND are all participants in both the Northern Mountain Caribou and community-based fish and wildlife planning processes, and will be able to maintain continuity between the two. The Mayo plan participants have suggested solutions to address the concerns affecting the local herds, which also fall within the broader scope of the Northern Mountain Caribou management plan.

Close monitoring of harvest of caribou is necessary to avoid overharvest, particularly in accessible herds.

PROPOSED SOLUTION

NND/YG: Monitor the harvest of all herds through the current systems.

CARIBOU	All Herds

Figure 2. Caribou Herd Range within the Na-Cho Nyäk Dun Traditional Territory.

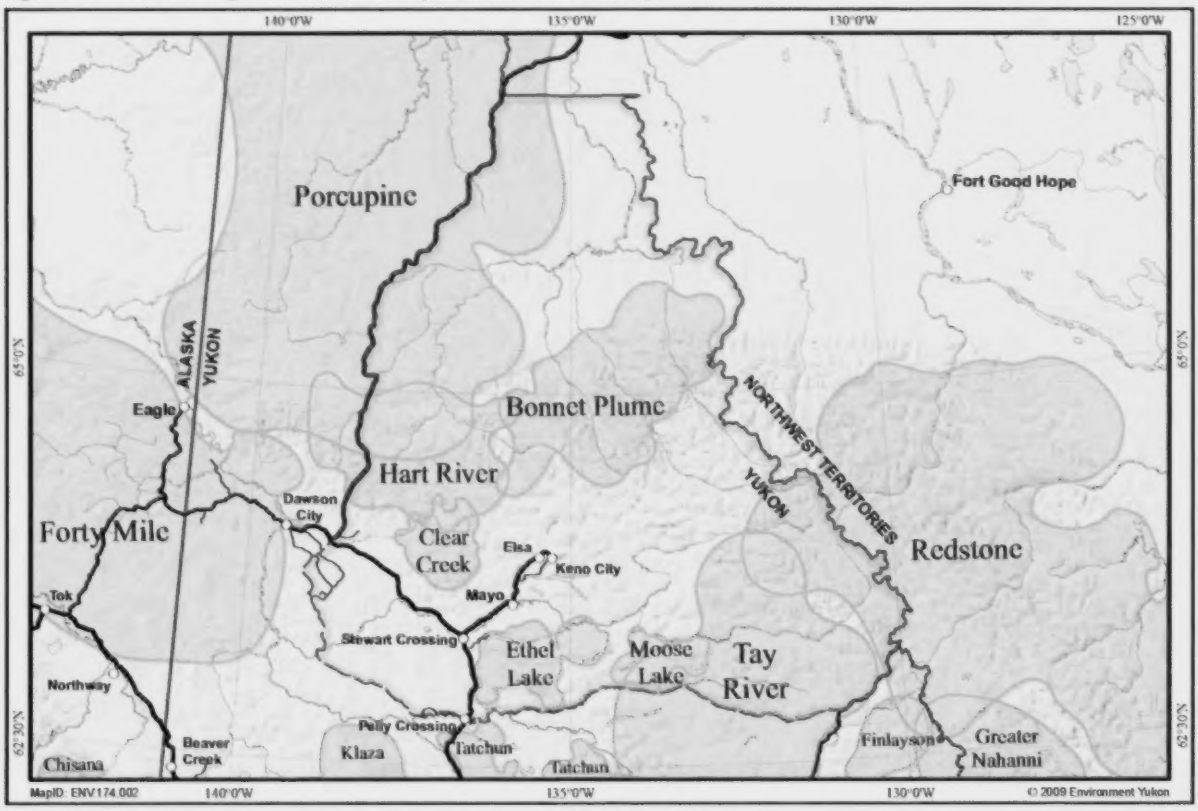


Photo: Hart River caribou, *Yukon government*

CARIBOU

Clear Creek Herd

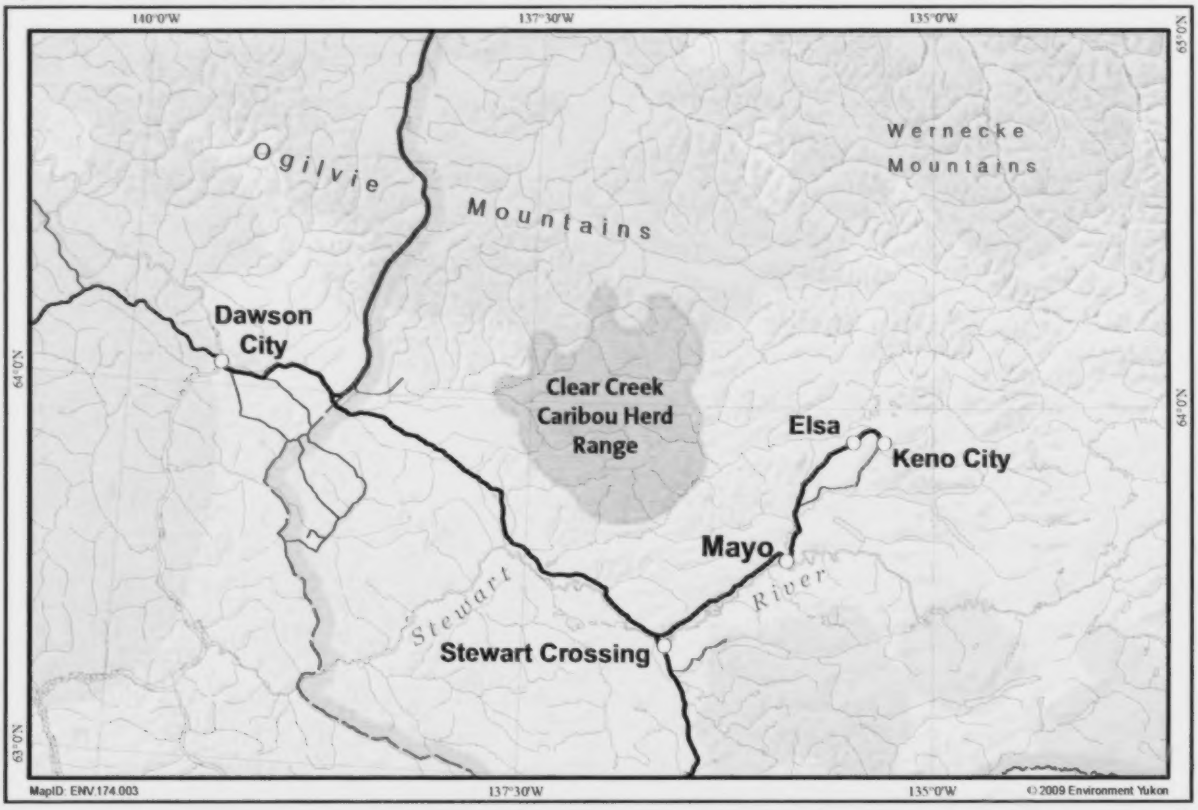
CONCERNS People are concerned about the potential for over-harvesting the easily accessible Clear Creek herd. Due to increased access, there is also concern about the impact of off-road vehicles (ORVs) on the habitat and to the herd itself. One person commented that the behaviour of the caribou has changed and that they seem more agitated.

Previous rut counts of this herd have shown that the number of bulls was fairly low but there was good calf survival.

PROPOSED SOLUTIONS **YG: Monitor the population with two rut counts during the next five years. At the mid-term work plan review, discuss whether the second rut count should be done based on the initial data collected.**

YG/MDRRC/NND: Experiment with getting annual data on calf survival through ground-based monitoring. The ground-based monitoring and aerial counts should be done in the same year to be able to compare results.

Figure 3. Clear Creek Caribou Herd Range, Na-Cho Nyäk Dun Traditional Territory.



CARIBOU	Ethel Lake Herd

CONCERNS There has been an ongoing concern for this herd since the 1997–2001 plan. The herd has been stable at about 300 animals since the early 1990s, but calf survival was very low between 1998 and 2001. Voluntary no-hunting of caribou in this herd has been requested since 2002. Calf survival has increased some since 2003 but is still lower than necessary to maintain herd stability. During the Ddhaw Ghro Habitat Protection Area management planning process, the importance of regularly monitoring this herd was discussed and recommended to YG and NND.

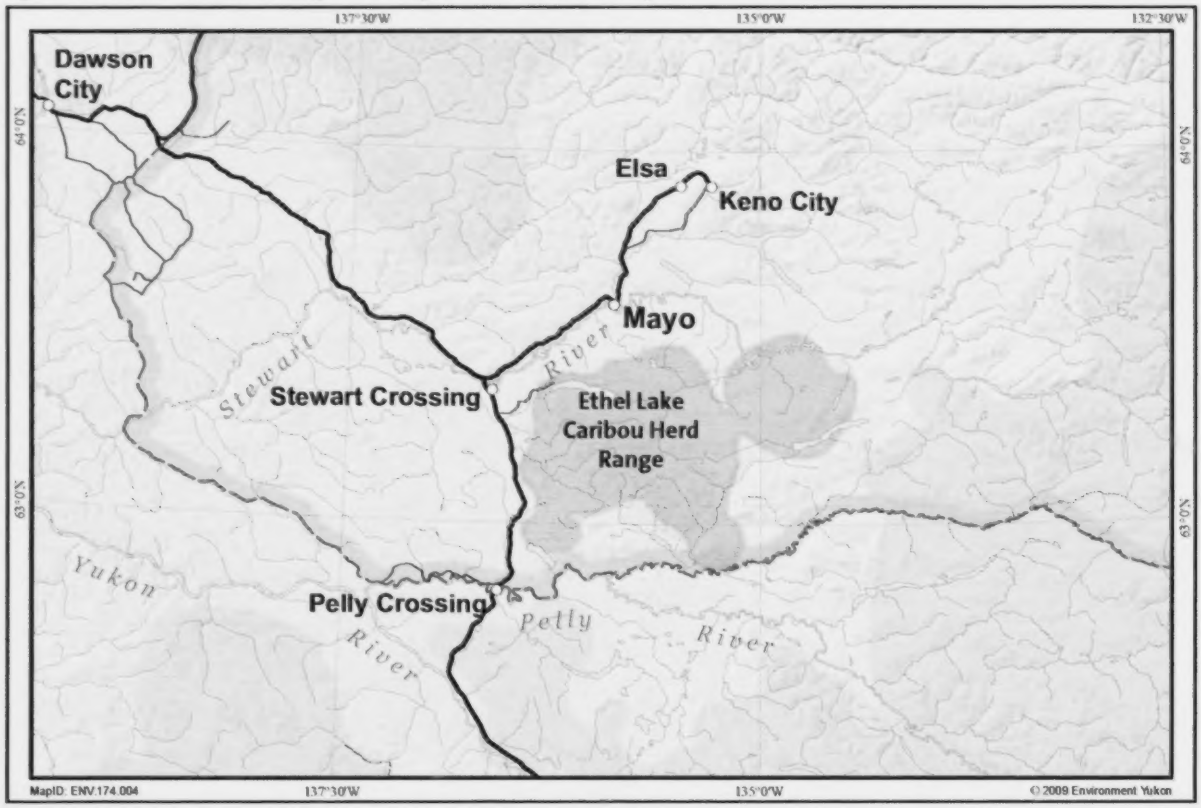
PROPOSED SOLUTIONS

MDRRC: Recommend to YG to keep voluntary no-hunting in place for the next three years with a review of recommendation in three years.

YG: Monitor the population through an annual rut count as needed.

YG/NND: Erect signs at both the Ethel Lake campground and at the NND outpost asking people to not hunt the caribou herd; this request will be evaluated in three years.

Figure 4. Ethel Lake Caribou Herd Range, Na-Cho Nyäk Dun Traditional Territory.



CARIBOU

Bonnet Plume Herd

CONCERNS

The Bonnet Plume caribou herd ranges in remote areas of the Wernecke Mountains, and there are no data on the size or health of this herd. During the 1970s and 1980s, some caribou from this herd were radio-collared, so there is some information about the herd's range and seasonal habitat use. Much of the more recent information available is from observations by pilots, outfitters and others flying through the area.

Increased mineral exploration within the range of this herd has spurred interest in establishing ongoing monitoring and getting baseline information about important habitats. However, there is limited access to the area and it is not a hunting area for the community. It is unknown how much harvest occurs by Northwest Territories hunters on the Bonnet Plume herd.

PROPOSED SOLUTIONS

YG/NND: Establish baseline information on the herd using radio collars to delineate the herd's range and seasonal habitat use.

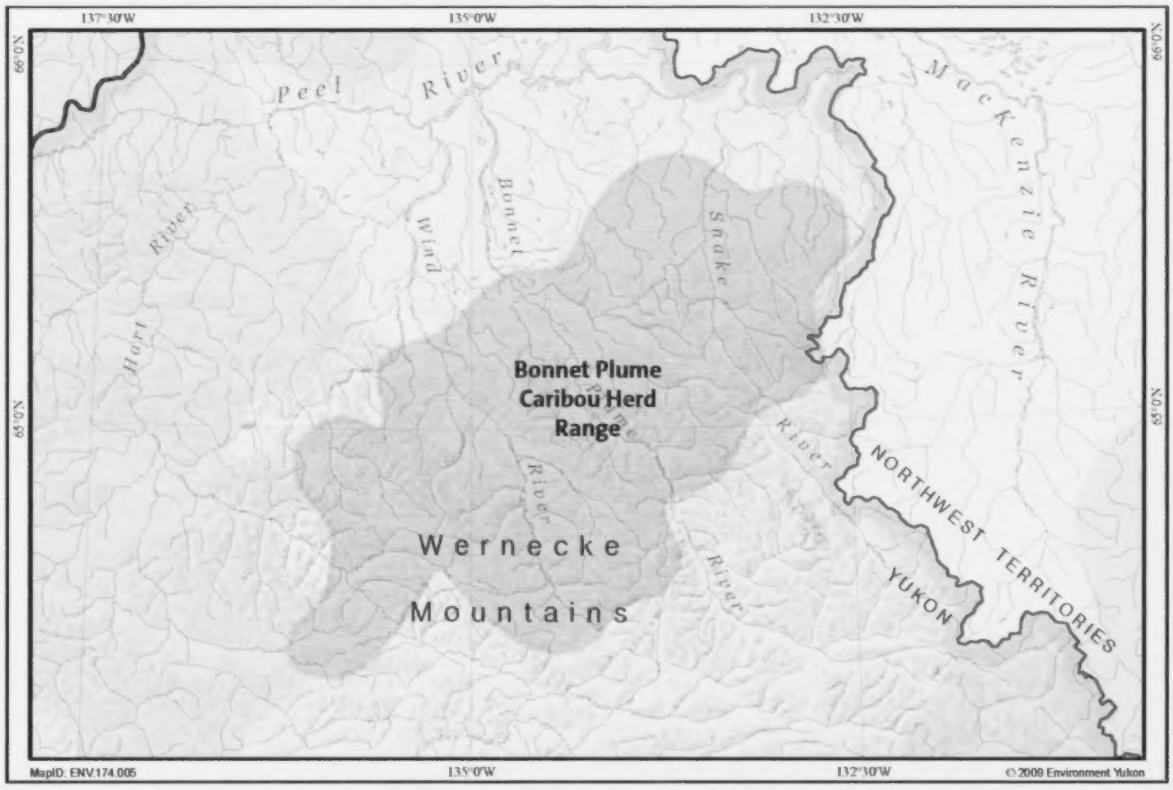
YG/NND: Attempt to get a population estimate mid-way through the plan, recognising that this may not be possible due to high expense and difficult logistics.

NND/YG: Explore options for alternative funding sources for getting baseline information such as from industrial users and the Government of the Northwest Territories.

NND/YG/MDRRC: Ensure that recommendations sent to YESAB on land use applications that may affect this herd reflect the herd's COSEWIC status as a population of Special Concern.

CARIBOU | Bonnet Plume Herd

Figure 5. Bonnet Plume Caribou Herd Range, Na-Cho Nyäk Dun Traditional Territory

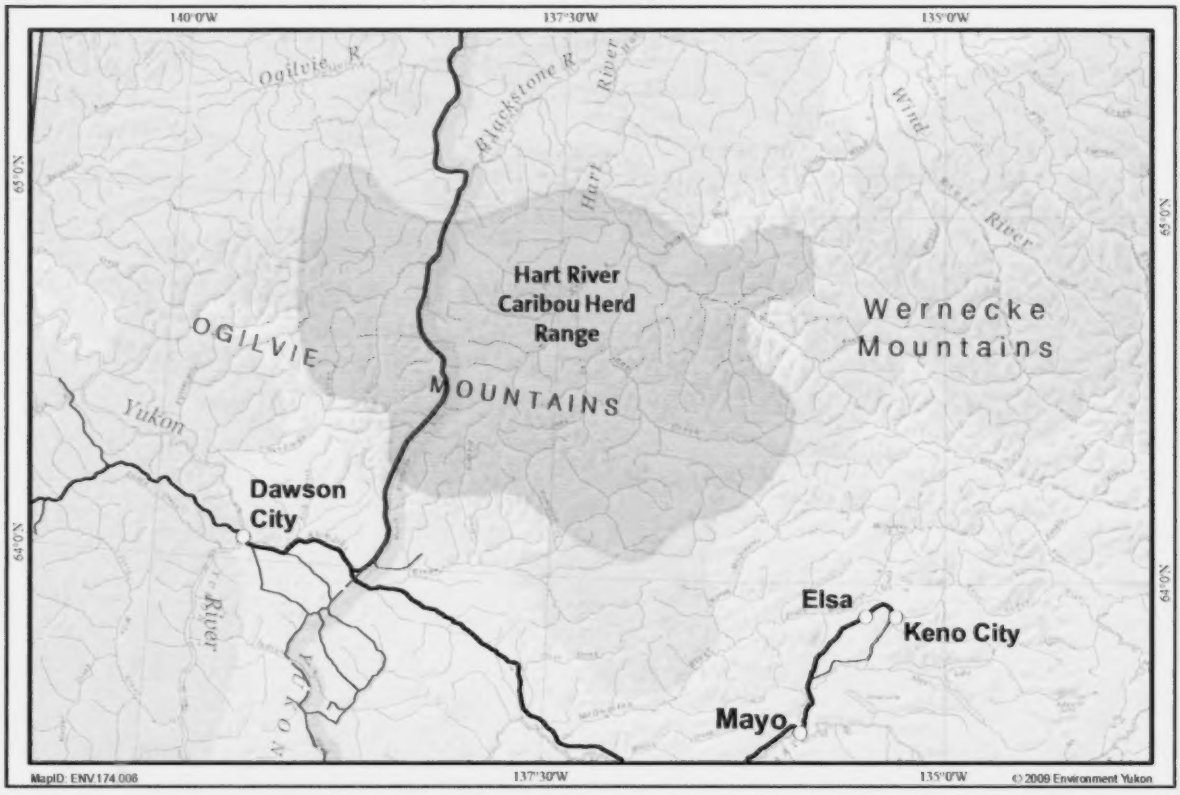


Hart River Herd

CONCERNS People are concerned about the declining numbers of the Porcupine caribou herd and the potential for accidental harvest of Hart River animals by Porcupine caribou hunters. Radio-collared Hart River caribou are presently monitored during hunting season to assess their vulnerability to harvest under the more liberal Porcupine caribou regulations and to restrict harvest during periods when that risk is high.

PROPOSED SOLUTION **YG: Monitor locations of collared Hart River caribou during hunting season and use these data to manage harvest to minimize the risk of overharvesting this herd.**

Figure 6. Hart River Caribou Herd Range, Na-Cho Nyäk Dun Traditional Territory.



Mayo–Elsa Herd

CONCERNS People have been seeing more caribou in the Mayo–Elsa area during the past decade. There have been observations of caribou along the Keno Ladue River, on Edwards Lake, and on Rambler and Bunker hills. The number and range of these animals is unknown, and they may make up their own herd or be a small group from another herd. There is some concern about these animals being hunted. People need to be made aware that the MDRRC is interested in knowing if there is a Mayo–Elsa herd, and be able to report sightings to a common place.

PROPOSED SOLUTION **YG/NND/MDRRC: Continue to gather information about caribou in the Mayo and Elsa area by recording local observations and gathering data as a part of other wildlife studies.**

DUCKS AND GEESE

CONCERNS

People are seeing changes with waterfowl in the Mayo area. Several people have commented that they are seeing fewer and fewer ducks around. People are also noticing more geese and swans in the Mayo area, although one participant noticed fewer swans along the Stewart River. One person commented that there are more ducks around Ethel Lake, that there are different types of ducks, and that they are staying around longer.

There is concern in the community about contaminants in ducks from both local sources such as the sewage lagoon and tailings from the Elsa mine as well as from other sources that may occur in their wintering range. Ducks Unlimited monitored waterbirds on the Elsa tailings ponds and on Christal Lake in 2004 in response to a request from NND and Access Consulting. There has been no monitoring by Ducks Unlimited of these areas since the mine assumed new ownership.

There was interest in knowing what kind of ducks and how many are using the Devil's Elbow area. Both Ddhaw Ghro and Devil's Elbow have been surveyed by Ducks Unlimited. A recommendation in the proposed Devil's Elbow–Big Island River Habitat Protection Areas plan is for ongoing monitoring of all fish and wildlife, including waterfowl.

PROPOSED SOLUTIONS

YG: Renew spring roadside waterfowl monitoring that used to occur in cooperation with the Canadian Wildlife Service.

YG: Request monitoring of waterfowl from the Northern Contaminants Program. There could be coordination with duck hunters to collect samples.

FRESHWATER FISH

CONCERNS

The populations and health of fish in the lakes throughout the NNDTT remain a strong concern for many residents. The most important lakes for fishing include Ethel, Mayo, Minto, McQuesten, and Ladue lakes. With increased people in the area, there are concerns about overfishing of lakes and the impacts that increased fishing on McQuesten Lake during moose calving season could have on moose populations.

Many people fish in Ethel Lake, and the campground there attracts anglers to the lake. There were mixed views among local residents on whether it has become easier or harder to catch trout in Ethel Lake and the reasons for the changes. There was a common view that the whitefish are much larger and that there are fewer small fish. Lower numbers of people netting whitefish, higher predation on young whitefish, and the impacts of beaver dams at lake inlets and outlets on whitefish reproduction are possible reasons. One workshop participant noted there is a lot of garbage left on the ice after ice fishing at Ethel Lake.

Other concerns about lakes and freshwater fish include the effects of climate change on trout habitat in smaller lakes, decreasing trout populations in Minto Lake, fishing pressure on Duo and McClusky lakes from paddlers, the lack of knowledge about the status of fish in Reid Lakes, and the health of grayling runs in the South McQuesten River, Talbot Creek, and Moose Creek.

PROPOSED SOLUTIONS

YG: Continue monitoring trout in key lakes – Ethel, Mayo, Minto, Janet, and Williamson – as scheduled every five years. At the mid-term review of the work plan, consider adding Francis, Reid and Ladue lakes based on concerns and new information.

YG: Conduct a creel survey on Ethel Lake midway through the plan.

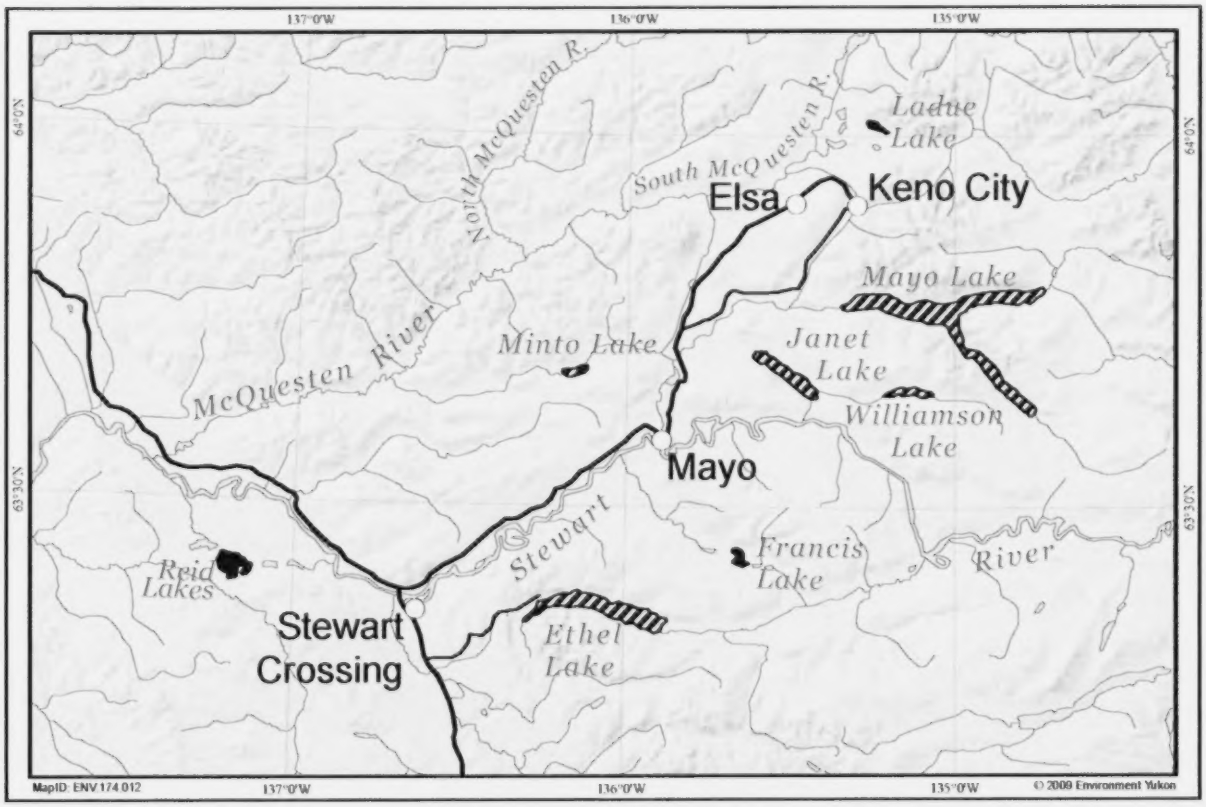
PROPOSED SOLUTION

YG: Collect information from previous studies and monitoring programs that looked at changes to lakes from climate change and the effects on trout habitat. Some work was done previously on Minto, Margaret and Fairchild lakes. Based on a review of this information, select lakes with trout habitat susceptible to change and continue monitoring.

YG: Continue to monitor the grayling fisheries at the South McQuesten bridge, Talbot Creek and Moose Creek.

NND: Work with fishers who gill net whitefish to study the trend in sizes of whitefish in Ethel Lake. Experiment with using larger mesh sizes to let smaller whitefish pass through nets.

Figure 7. Lake Trout Survey Lakes, Na-Cho Nyäk Dun Traditional Territory. Hatched lines show lakes currently surveyed. Reid, Francis and Ladue Lakes may be considered for regular surveys during the mid-term review.



HABITAT

CONCERNS

There were many concerns related to habitat in all parts of the traditional territory. People have noticed many changes in recent years including movement patterns of moose changing as a result of less snow in Brain Pass area on the Wind River Trail, water levels of lakes in the Bonnet Plume area changing, willows drying up at Commissioner's Bend near Stewart Crossing from an outbreak of the willow leaf blotch miner (a small moth), and the lake on this side of Moose Creek along the Klondike Highway drying up.

Habitat quality can be affected by several factors, including climate change, forest fires, and human influences such as increased industrial activities, access, and use of off-road vehicles. There is also the concern that there are likely to be more agriculture lots and rural residential lots along the newly extended power line, affecting wildlife habitat in those areas.

The two main concerns related to habitat were the immediate need for baseline habitat information that could feed into the various land use planning and development processes, as well as the need for background water quality information to be able to detect changes as a result of industrial activities taking place.

PROPOSED SOLUTIONS

YG/NND: Gather baseline information on fish and wildlife habitats especially in areas where development is planned. This information can be provided to the MDRRC.

YG/NND/MDRRC: Identify key wildlife areas through collection of baseline information and traditional knowledge and identify areas for special management and protection.

Photo: Stewart River, *Cheryl Klippert*

Figure 8. Devil's Elbow Habitat Protection Area, Na-Cho Nyäk Dun Traditional Territory.

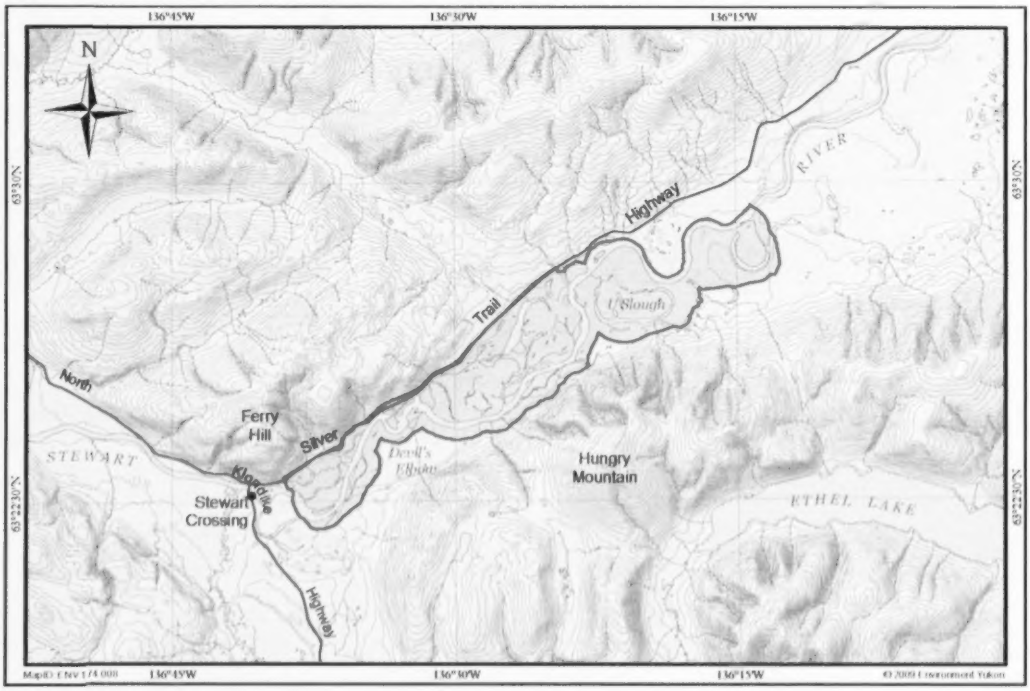
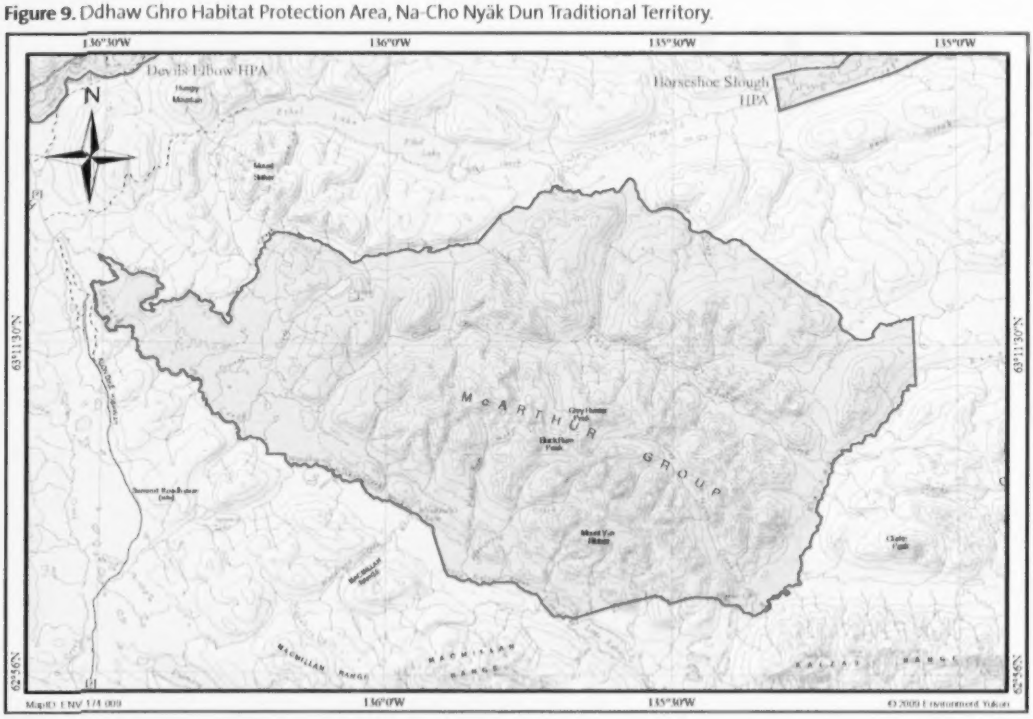


Figure 9. Ddhaw Ghro Habitat Protection Area, Na-Cho Nyäk Dun Traditional Territory.



PROPOSED SOLUTIONS

YG/NND: Gather baseline information on spawning and wintering habitats of anadromous (that is, migrating to salt water and returning to fresh water to spawn) salmonids, cisco and other whitefish species in the Peel River watershed. These fish form the basis of the subsistence economy on the river and both oil and gas and minerals exploration activities are increasing in this area.

YG/NND: Gather baseline information about water quality in the traditional territory. There is a need for this information specifically for the Peel, Wind and Bonnet Plume rivers. There are also other agencies monitoring water quality, and these data need to be summarized.

NND: Request joint monitoring of water quality with Yukon Department of Energy, Mines and Resources and other agencies or contractors conducting monitoring.

YG/NND/MDRRC: Gather information about willow leaf blotch miners and recommend monitoring or management actions if appropriate.

Figure 10. Peel Planning Region, Na-Cho Nyäk Dun Traditional Territory

INVASIVE PLANTS

CONCERNS

New plants are making their way north and people are noticing changes to the landscape as a result. Sweet clover is becoming more noticeable along many Yukon roadways. It grows high and very fast and has become safety hazard for people and animals. People have concerns about these new plants and their impacts on wildlife and native plants.

During road construction, soils and the native plants are disturbed along the roadsides. New species can take over these areas and displace the native species. This could eventually cause problems for small mammals that rely on native plants for their survival.

PROPOSED SOLUTION

NND/YG/MDRRC: Continue to recommend that proponents re-vegetate with native species in reviews of land use applications and other applications affecting road right-of-ways.

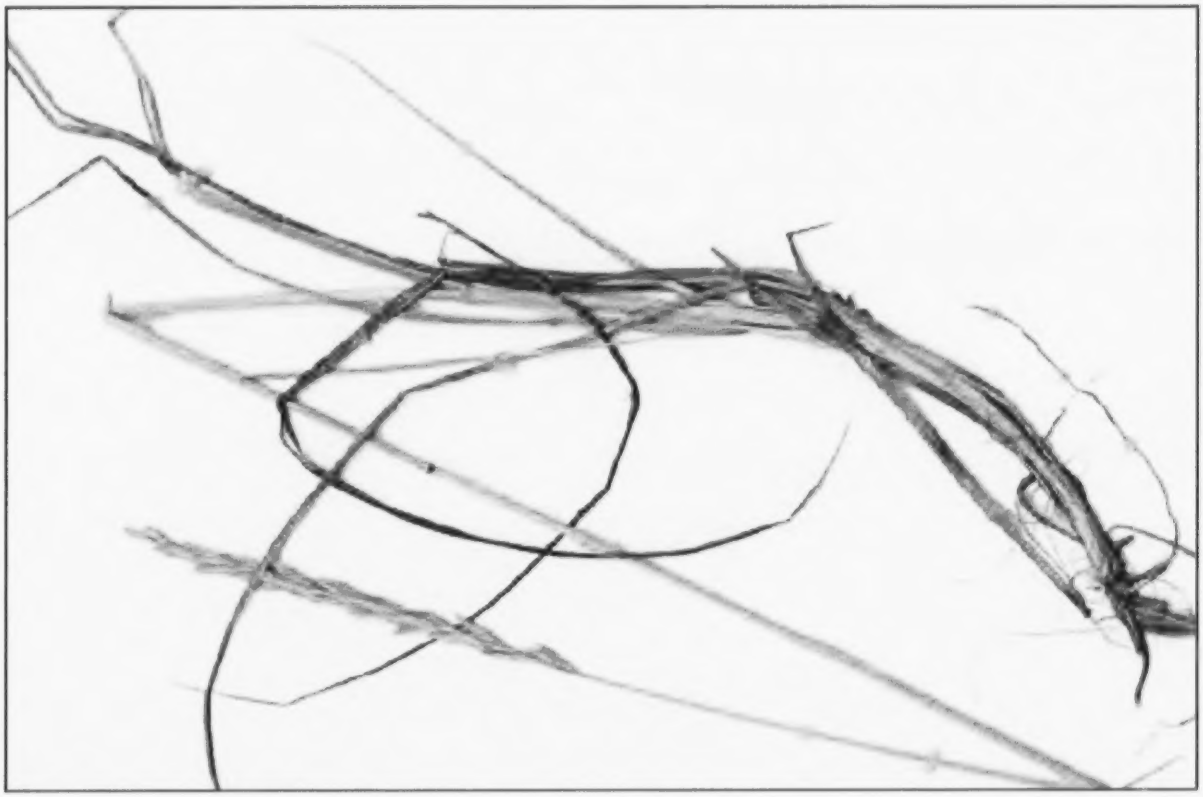


Photo: Altai Wild Rye, *Yukon government*

LAND USE MANAGEMENT AND PLANNING

land use planning and environmental assessments

CONCERNS Land use planning plays a large role in addressing many issues related to protection of important wildlife habitats and avoiding conflicts among land uses. People expressed concern about development occurring in the Peel region prior to the regional land use plan being finalized, as industrial development may preclude some habitat protection being considered through this process. Locally, there is a concern about unplanned agricultural developments and the need for land use planning that includes an assessment of all the values of the area.

PROPOSED SOLUTIONS

MDRRC/NND/YG: Identify and advocate wildlife values in the Peel watershed land use planning process. The wildlife information has been collected, but there is a need to identify what values in the area are most important and require special management. The draft plan will be available for comment in April 2009, with the final plan expected for later in 2009.

NND/MDRRC/YG: Identify and advocate wildlife values when reviewing land use applications.

NND/MDRRC/YG: Develop a Local Area Plan for the area around Mayo with the involvement of the Village of Mayo to identify suitable residential and agricultural areas and reduce land use conflicts.

Photo: Lower Pelly, *John Meikle*

tourism and outfitting land uses

CONCERNS

Development of wilderness tourism and facilities associated with outfitting may also have an impact on wildlife habitats. As a result of the 1997–2001 plan, the MDRRC requested by letter that governments consider adopting a policy to manage commercial wilderness recreation (see Appendix B). It was suggested that the policy include a means of monitoring the levels of commercial wilderness tourism activities and dispersing these activities when needed to avoid disturbances. The Draft Peel Watershed Land Use Plan also raised concerns about the potential for overcrowding and includes recommendations about monitoring and managing use on some rivers. The *Wilderness Tourism Licensing Act* (1999) includes a regulation (not enacted yet) to address overcrowding.

A new Big Game Outfitters and Commercial Wilderness Land Tenure policy is currently being developed by YG. As suggested in the review of the 1997–2001 plan, the MDRRC should review the policies and determine if the wildlife concerns are addressed.

PROPOSED SOLUTION

MDRRC: Follow-up with governments (Department of Indian Affairs and Northern Development [DIAND], YG, NND) regarding the request that tourism policies consider the potential impacts of commercial operations on fish and wildlife and their habitats. A new *Wilderness Tourism Licensing Act* is in place, and the Big Game Outfitters and Commercial Wilderness Land Tenure policy may address the concerns of the community. The MDRRC needs to review these and other relevant legislation and policies to determine if the local concerns are addressed.

MONITORING

CONCERNS There is a need to continue monitoring of many species throughout the NNDTT to monitor ecosystem health and changes associated with climate change. This knowledge and information can be collected in many ways.

A Community Ecological Monitoring Project (CEMP) was started in Mayo in 2004, with funding from Environment Canada and YG. Abundance of a range of important parts of the boreal forest ecosystem including berries, spruce cones, songbirds, owls, mice and voles, snowshoe hares, and carnivores are monitored using ground-based techniques. Local residents most active on the land are also interviewed annually to gather their observations about environmental conditions, wildlife, and subsistence activities

PROPOSED SOLUTION **YG/NND: Continue Community Ecological Monitoring Program.**

Photo: Snowshoe Hare, *Yukon government*

MOOSE	harvest

CONCERNS There is a strong concern about high harvest pressure and the potential for overharvesting moose in the Mayo area. Although numbers of moose have stayed about the same during the past decade, a survey in 2006 showed that the proportion of bulls is low (about 42 bulls/100 cows), reflecting the relatively high harvest (known harvest 3–4%) in the area. Since people are still getting the meat that they need, there is not a desire for restrictions immediately. People do feel, however, that we need to be proactive about harvest management before population levels start to decline.

Some people feel that the voluntary closure for moose hunting at McQuesten Lake is not working as there are still some hunters using the area. Local people are frustrated as most are respecting the closure yet it is not being respected by everyone. Residents of Keno feel that there is now more pressure near Keno since people cannot harvest at McQuesten Lake.

A concern was raised about some First Nations hunters taking too many cows and calves and that this affects the overall population. Alternatively, some thought that the low proportion of bulls in the Mayo area indicated that fewer bulls and more cows should be harvested. There was some concern about how hunting has changed. It used to be that you were "only taking what you need" and now people are not following the traditional laws. Elders often have difficulty getting moose because accessible areas are heavily hunted.

Photo: Moose cow and calf, *John Meikle*

MOOSE

harvest

PROPOSED SOLUTION

MDRRC: Request that both NND and YG continue with an open harvest but start a system of asking hunters to report all kills within 48 hours in the Mayo Moose Management Unit; in years when there is too much harvest, the area would be closed voluntarily. This method is similar to the approach used in Faro in recent years.

YG/NND/MDRRC: Develop a communication plan for moose harvest management actions considering such tools as a plain language synopsis and road signage.

YG/MDRRC/NND: Evaluate voluntary harvest reporting system to determine if it is an effective method for ensuring harvest is sustainable.

NND: Identify elder hunting areas through a wildlife questionnaire.

populations

CONCERNS

Moose populations are affected by various factors including predation, a changing climate, and human harvest. Snow depth and amount of crusting can affect the ability of moose to escape wolves. There are predictions of increased hunting activity from new projects and people in the area. There is a need to keep close track of moose populations to make sure they stay healthy.

Outfitters are out on the land and see a large part of the traditional territory. We need to know what they are seeing on the land.

PROPOSED SOLUTION

YG: Repeat aerial survey of moose in the Mayo area; the last survey was done in 2006. Conduct lower-intensity surveys in intervening years to monitor population composition.

YG: Continue moose monitoring in the Upper Klondike Highway Moose Management Unit.

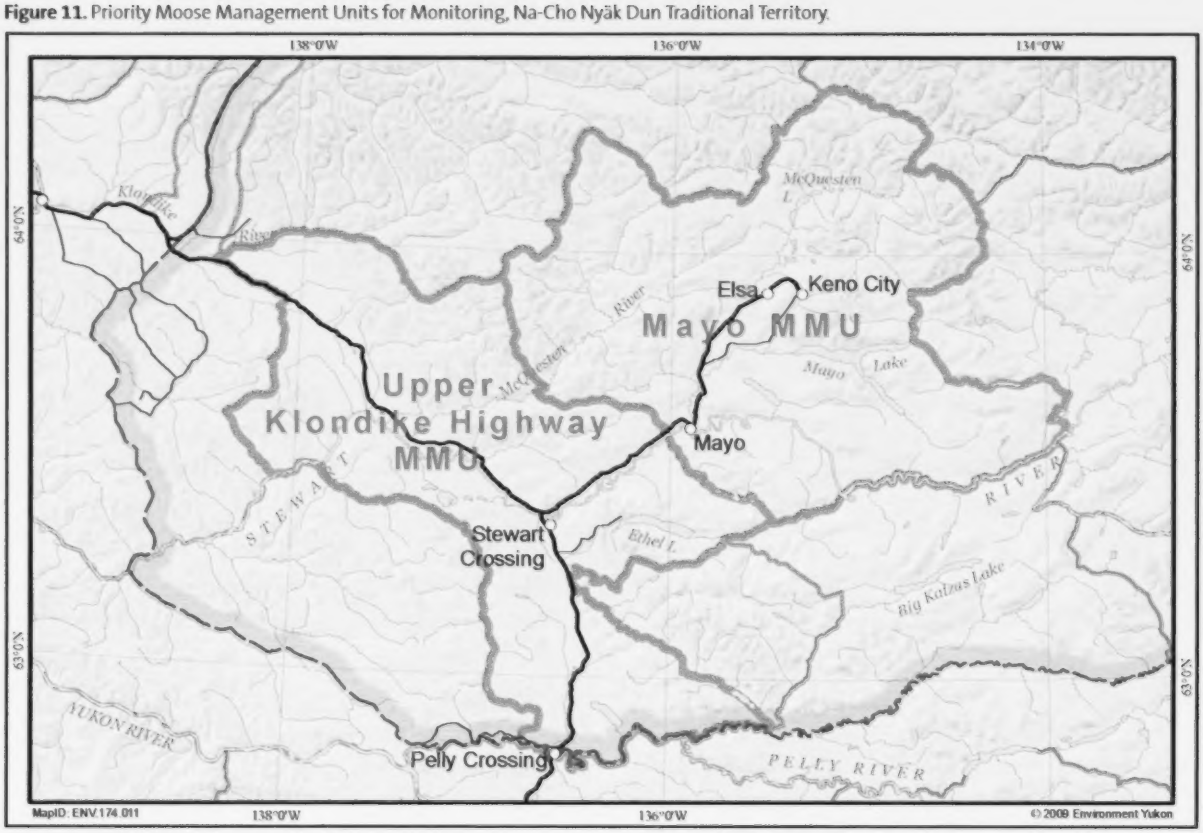
YG/MDRRC/NND: Continue ground-based moose monitoring program in the Mayo area and expand this to ask outfitter guides to keep track of all wildlife they observe.

MOOSE	meat management

CONCERNS People are concerned about meat wastage from both outfitters and local residents. In recent years, the First Nation has been working with outfitters to ensure that there is better quality meat coming in and that it is being distributed in the community. Although there have been improvements, there is still some concern that the amount of meat coming in is small compared to the numbers of moose being taken by outfitters. It was also noted that outfitters are not required to donate their meat in the community.

PROPOSED SOLUTION **MDRRC/NND: Work with outfitters to improve the distribution of meat in the community. Let them know how the meat is used, where the meat goes, and what works best.**

Figure 11. Priority Moose Management Units for Monitoring, Na-Cho Nyäk Dun Traditional Territory.



OUTFITTERS

CONCERNS

Some community members have expressed concerns about the amount of moose that are taken by outfitters. There is also a concern that outfitter concessions are overlapping with local hunting areas.

Outfitters negotiate quotas for moose and caribou in a three-way process with the MDRRC and YG, but this is not familiar to some people.

PROPOSED SOLUTIONS

MDRRC: Communicate the outfitter quota process to the community.

MDRRC: Continue to discuss avoidance of local harvesting areas with outfitters during quota negotiations.

Photo: Canoe on the MacMillan River, *John Meikle*

SHEEP

CONCERNS

There is a need for more information on populations and habitats of sheep in the NNDTT, including more knowledge about the potential impacts from climate change on their habitat. Industrial activity in the Wernecke Mountains is greatly increasing and there are worries about how this will affect sheep.

The concern was also raised about exploration occurring too close to sheep mineral licks that have been identified in the Peel watershed. Information on mineral licks provided as a part of assessments of mineral exploration projects is only used to develop guidelines for exploration activities and is not being translated into conditions or anything enforceable.

The only accessible sheep population in the Mayo area is the small number of animals that use the mountains south of Ethel Lake; more have been seen there in recent years.

PROPOSED SOLUTIONS

YG/NND: Gather data on sheep populations and important habitats to establish baseline information about sheep in Werneckes.

YG/NND: Determine if Ethel Lake sheep population is expanding or increasing its range.

Photo: Blackstone sheep, *John Meikle*

STEWARDSHIP

CONCERNS

There was a great deal of discussion during the community workshops about the need for respect and more stewardship of the land. Some participants expressed concern that the laws that govern wildlife and habitat are based on exploitation and not on respect. People need to know things like the health of streams and animal populations, and need baseline information before development happens.

More people need to get out and "... walk on the land – you put your footprint on the land and you see stuff." We also need to build trust between people and the different governments.

The MDRRC has developed a work plan that emphasizes trying to get more youth out on the land and encouraging them to be interested and involved with traditional activities and wildlife conservation and management.

PROPOSED SOLUTION

MDRRC: Continue to support stewardship and youth activities throughout the life of this plan.

NND/MDRRC/YG: Implement educational programs such as first hunt, Hunter Education and Ethics Development (HEED), firearms safety, traditional practices, meat handling, trapping, "youth on the land – outdoor pursuits" to get more youth active on the land.

TRADITIONAL KNOWLEDGE

CONCERNS There is a need for traditional knowledge for many of the planning issues mentioned in this plan. NND has been working with the Yukon First Nations Heritage Group to develop guidelines for how information can be collected and shared. Information about populations and important habitats is important for managing wildlife, so having guidelines for sharing this information is essential.

Although there are no direct recommendations in this plan about traditional knowledge, it is acknowledged by all plan partners that traditional knowledge is a fundamental component of wildlife management and that it will be used in decision making and other projects recommended in this plan wherever possible.

Photo: Jasper Creek on the Snake River, *John Meikle*

TRAPPING

CONCERNS

There are issues with beaver dams blocking fish movements throughout the NNDTT. Specific problem areas mentioned include Talbot Creek, Crooked Creek, Brain Pass and Janet Creek. There was a general concern that wolverine, fox and coyote populations have also decreased in the NNDTT.

Concerns were raised regarding the Pelly area of the NNDTT where marten numbers have declined over the past couple of years and are no longer found along some traplines.

There are concerns about the sustainability of trapping and the impact that this is having on lifestyles and on wildlife populations. There are fewer people trapping for various reasons including expensive fuel prices, lack of desire for the lifestyle, and the difficulty of obtaining traplines. Also, some traplines have not been used in 15–20 years, and they are difficult to re-establish after a period of time.

Some trappers expressed concern about the current management of traplines and expressed the desire for local control over traplines. Some people were also concerned about the use of traplines for tourism purposes and did not support this initiative.

PROPOSED SOLUTIONS

MDRRC: Review trapline allocation guidelines once the *Wildlife Act* has been amended for conformity with the *Umbrella Final Agreement*.

MDRRC/NND/YG: Train a local trapper to teach wolf snaring in Mayo. Contact one of the people who have already taken the wolf snaring course and see if they are interested in becoming a trainer.

NND: Explore trapping incentive programs from other communities. Evaluate trapping incentives and their usefulness and implement those with good potential in the NNDTT.

WATER QUALITY

CONCERNS

There are ongoing concerns in the community about water quality and the effects of previous mining operations as well as current activities and development. Most people realise that there is monitoring occurring, but are concerned that the information is not coming back to the community.

The McQuesten River system is of great concern because of the activities occurring around it and one participant commented on high levels of arsenic in some of the creeks that feed into the river.

In the Peel area, a participant noted that some lakes and creeks are drying up, possibly from climate change (Big Dave Lake, along the horse trail between McQuesten and Goz lakes), and there was concern about impacts of oil and gas and mining on water quality in the Peel watershed.

PROPOSED SOLUTIONS

MDRRC: Request regular updates from Access/Alexco on water quality monitoring in the Elsa area in a format that is understandable.

NND: Encourage periodic testing of water quality by independent consultants.

MDRRC: Communicate the results of the findings of studies of contaminants done at Hanson Lakes to the public through MDRRC newsletters.

Photo: Fraser Falls, *Tony Gawa*

WILDLIFE VIEWING

CONCERNS

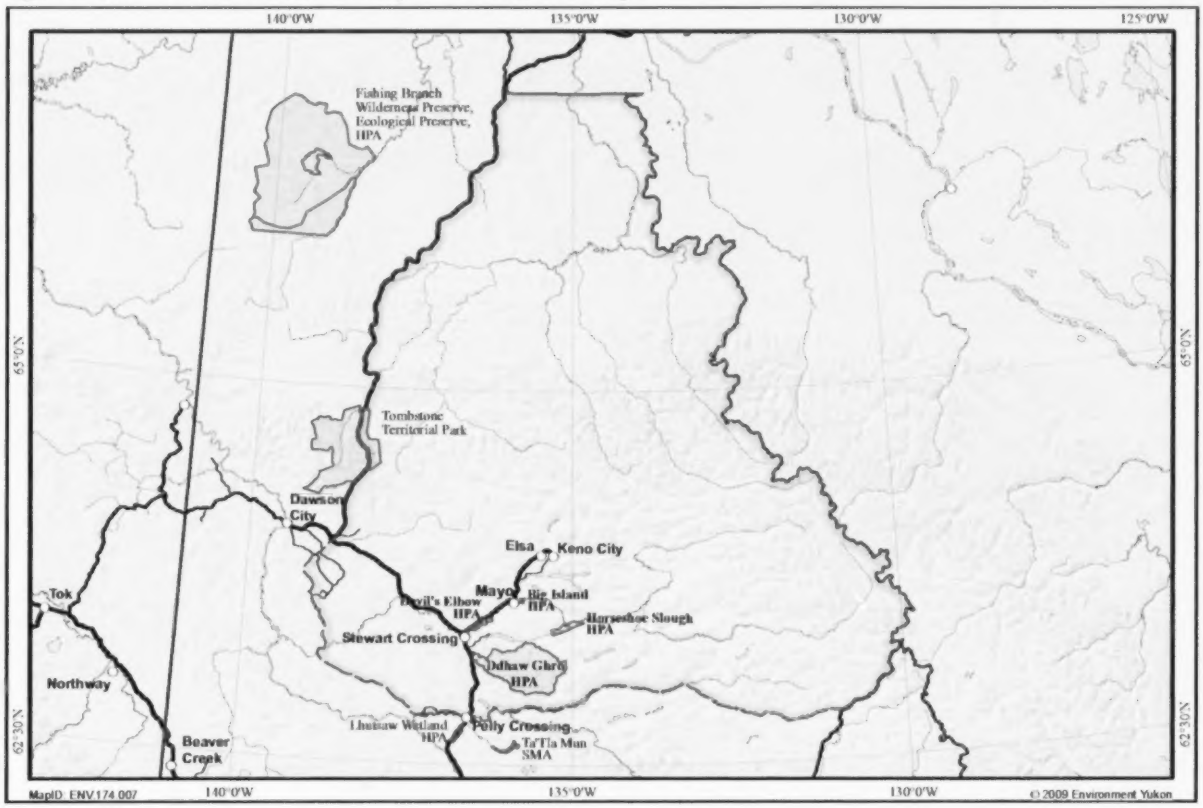
Since the last plan, the Devil's Elbow viewing site has been developed and there was some interest in developing other sites. Other potential sites for wildlife viewing include: Big Dave Lookout, Elsa Flats, Conservative Trail, sites along the Klondike Highway, Louis Brown Lookout and Fraser Falls.

Some expressed the view that there was not a need for any more wildlife viewing sites in the NNDTT. Reasons for this included the concern that wildlife viewing opportunities attract new people to the area and there is already enough pressure on hunting and other traditional activities. They felt it was better to promote the sites that exist, and not to develop new sites.

PROPOSED SOLUTION

MDRRC/NND/YG: Evaluate potential wildlife viewing sites during development of the local area plan.

Figure 12. Parks and Protected Areas, Na-Cho Nyäk Dun Traditional Territory.



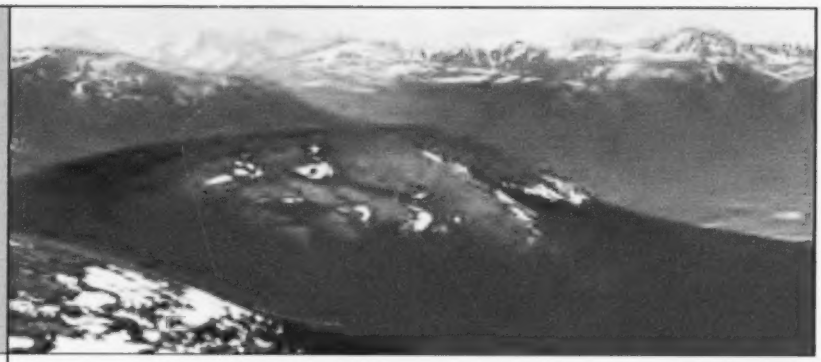
plan review

The plan participants will undertake two reviews of the 2008–2013 plan. The mid-term review will happen in 2010, and will determine progress made on the plan and identify any needs to adjust the focus of the plan. The second review will be carried out in 2013 following completion of plan implementation. At that time, the planning participants will identify which solutions were fully addressed and completed, which were not completed with the accompanying rationale, and which merit further work. Depending on the outcome of this assessment, the planning participants may choose to proceed with a follow-up plan to address outstanding, ongoing, or new concerns and solutions. Results of the reviews will be made accessible to the community, either through local newsletters or public meetings.

This plan is intended to identify and alleviate fish and wildlife concerns and to assist in facilitating the cooperative management of fish and wildlife populations and their habitats in Na-Cho Nyäk Dun traditional territory. As such, and through mutual agreement, the planning participants may agree to modify or refocus this work plan to address new information or management direction at any time during plan development or implementation.

Photo: McDonald Valley, *John Meikle*

appendices



APPENDIX A

Issues from previous community-based fish and wildlife management plan for the Na-Cho Nyäk Dun traditional territory carried forward to this plan.

	2002–2007 Concern	2002–2007 Solutions	Page reference in 2002–2007 plan	Page reference in 2008–2013 plan
1	Some elders are concerned that moose populations are low around Mayo.	Count moose to see if numbers have changed since 1998. Inform hunters about the effects of cow moose hunting on populations in the area recognizing that NND elders do hunt cows at certain times of the year.	4–5	30
2	Moose populations around McQuesten, Ethel, Mayo and Minto lakes could be overhunted and dangerous hunting occurs there as well.	Use registration/permit hunts to disperse hunting pressure. Post permit hunt signs around Ethel and McQuesten lakes.	7	29–30
3	We need to develop a proactive plan to protect moose from overharvest.	Collect all harvest information from First Nation, resident and non-resident hunters. Monitor moose numbers Move hunting areas around (rotational refuge).	9–10	29–30
4	The population status of the Ethel Lake caribou herd is still uncertain.	Maintain and continue to promote the voluntary no-hunting practice of the Ethel Lake caribou herd. Monitor the population status of the Ethel Lake caribou herd.	11–12	15

Photo: Hess Mountains, *John Meikle*

APPENDIX A

2002–2007 Concern		2002–2007 Solutions	Page reference in 2002–2007 plan	Page reference in 2008–2013 plan
5	The numbers and range of caribou in the Mayo–Elsa area are unknown.	Attempt to identify size and number of Mayo–Elsa caribou herd.	15	18
6	Some people believe that the grizzly bear numbers are underestimated in the eastern part of the NND traditional territory – particularly in the Snake River area.	YG should re-evaluate the estimate of grizzly bears in the eastern NND traditional territory.	17–18	11
7	Lake trout could be overfished in Ethel, Mayo, Duo, Janet and Williamson lakes.	Monitor fish harvest on Ethel Lake. Monitor fish populations on Ethel, Mayo, Janet and Williamson lakes. Limit harvest of lake trout on Duo Lakes.	20–21	20–21
8	Residents are concerned about the water quality at Mayo Lake, Five Mile Lakes and Lightening Creek.	Request and assemble water quality information (or testing where applicable) for Mayo Lake, Five Mile Lakes and Lightening Creek.	24	20–21
9	Distribution of meat provided by outfitters needs to be improved.	Provide better information to outfitters about who in the community wants to receive meat.	27	32
10	Increased off-road access to NND traditional territory causes wildlife and habitat disturbance.	Continue to pursue ways to manage access and meanwhile, use interim protection measures to do so.	31	10
11	Identification and mapping of important habitat areas needs to be coordinated and focused on areas that have the greatest development potential and to meet the requests of Regional Land Use Planning Commissions.	Coordinate the collection and organization of wildlife habitat information to be able to respond to development proposals and land use planning initiatives.	32–33	22–24

APPENDIX A

	2002–2007 Concern	2002–2007 Solutions	Page reference in 2002–2007 plan	Page reference in 2008–2013 plan
15	Area-specific plans are needed for large-scale developments that could affect wildlife habitats through disturbance, direct destruction or contamination.	Work with companies as required to develop plans to manage wildlife needs in areas of development.	33	26
16	Increased tourism could affect fish and wildlife and their habitats.	MDRRC to follow-up with governments (DIAND, YTG, NND) regarding the request for tourism policies to consider the potential impacts of commercial operations on fish and wildlife and their habitats.	34	27
17	Some traplines are not utilized and people want to trap but do not have the opportunity.	Make it possible for more people to get involved in trapping.	40	36

APPENDIX B

List of issues raised by the community but not addressed in the 2008–2013 plan.

Issue	Description	Why the issue was not addressed
Outfitter building	There are concerns about a lodge built by an outfitter along the Bonnet Plume River.	This issue is being addressed through the courts.
Salmon	There are concerns about salmon habitat and a need for more inventory of stocks.	Issues related to salmon are under the jurisdiction of Fisheries and Oceans Canada, and not within the mandate of the planning participants.
	There is an interest to monitor fish above the falls and it was suggested that NND could do this monitoring.	
	Monitoring salmon is expensive and requires gear and equipment.	
	A study design is needed to understand how many fish make it over the falls.	
	There is a need for more ground-based monitoring of salmon and less reliance on Alaskan data.	
Freshwater Fish	People are concerned about the amount of trout being taken from Minto Lake and think that attention is needed on the daily limits.	A regulation has been passed limiting harvest of trout on Minto Lake.
Ducks and geese	By the time hunting season is open, ducks and geese have migrated out of the traditional territory.	There is a regulation change in process to address this issue.
Sheep	There should be a permitted opportunity to hunt McArthur or White Mountains ranges, a couple of sheep harvested in these areas would not hurt.	The request to harvest sheep in the McArthur range goes against the Ddhaw Ghro Habitat Protection Area Management Plan and public hunting in this area is prohibited in the Na-Cho Nyäk Dun Final Agreement. The White Mountains sheep population only has about 50 animals.
Elk and ticks	Questions were raised about the spread of ticks from elk to other species.	This issue is being addressed by the Yukon elk technical team and the management committee.

APPENDIX C

Summary of Proposed Surveys of Fish, 2008–2013

Survey	Description	When?	Who?
Lake Trout Surveys	Netting surveys to get indices of abundance of lake trout in Ethel, Mayo, Minto, Janet, and Williamson lakes. The goal is to do these each five years. Consider new surveys on Reid and Ladue lakes.	Target Years: Ethel Lake (2011), Mayo Lake (2010), Minto Lake (2011), Janet Lake (2010), Williamson Lake (2010)	YG
Ethel Lake Creel Survey	Interview surveys of anglers to estimate harvest of fish.	Midway through plan	YG
Spring Grayling Run Monitoring	Surveys to monitor the sizes of grayling caught each April in the South McQuesten River, Talbot Creek, and Moose Creek fisheries.	Annually	YG
Peel Fish Habitat Surveys	Ground-based or aerial surveys to map important spawning and wintering habitats for salmonids, cisco, and other whitefish species in the Peel River watershed.	During 5-year life of plan	YG, NND

Summary of Proposed Surveys of Birds, 2008–2013

Survey	Description	When?	Who?
Roadside Waterfowl Counts	Ground-based surveys in the spring of waterfowl numbers in local wetlands.	Annually	YG in cooperation with Canadian Wildlife Service

APPENDIX C

Summary of Proposed Surveys of Mammals, 2008–2013

Survey	Description	When?	Who?
Mayo Moose Management Unit Moose Monitoring	Aerial survey in early winter to determine moose population size and composition by age and sex; last surveyed in 2006. Low-intensity aerial and ground-based surveys in intervening years to monitor composition.	Census midway in plan; monitoring ongoing.	YG
Upper Klondike Highway Moose Management Unit Moose Monitoring	Low-intensity aerial and ground-based surveys to monitor moose population composition.	Ongoing	YG
Ground-based Moose Monitoring	Fall local knowledge surveys to monitor the composition of the moose population.	Annually	YG, MDRRC, NND
Clear Creek Caribou Rut Count	Aerial survey to determine herd composition by age and sex.	Twice in 5 years of plan	YG
Ethel Lake Caribou Rut Count	Aerial survey to determine herd composition by age and sex.	Annually	YG
Bonnet Plume Caribou Census	Aerial survey to determine herd size and composition. Remoteness of area will make it expensive and difficult to complete this survey.	During 5-year life of plan	YG, NND
Wernecke Mountains Sheep Surveys	Aerial surveys and interviews to establish baseline information and map important habitats of sheep in the Wernecke Mountains.	During 5-year life of plan	YG, NND
Ddhaw Ghro Sheep Survey	Aerial survey to determine the population composition by age and sex, numbers, and range of sheep in the Ddhaw Ghro and Ethel Lake areas.	Annually during the Ethel Lake caribou rut counts	YG, NND
Wildlife Key Areas Surveys	Targeted aerial surveys and interviews to map important habitats for wildlife, especially in areas where development is occurring or planned.	Ongoing	YG, NND, MDRRC
Community Ecological Monitoring Project	Ground-based surveys and interviews to monitor trends in the abundance of carnivores, hares, rodents, birds, berries, mushrooms, and spruce cones.	Annually	YG, NND

Yukon
Environment